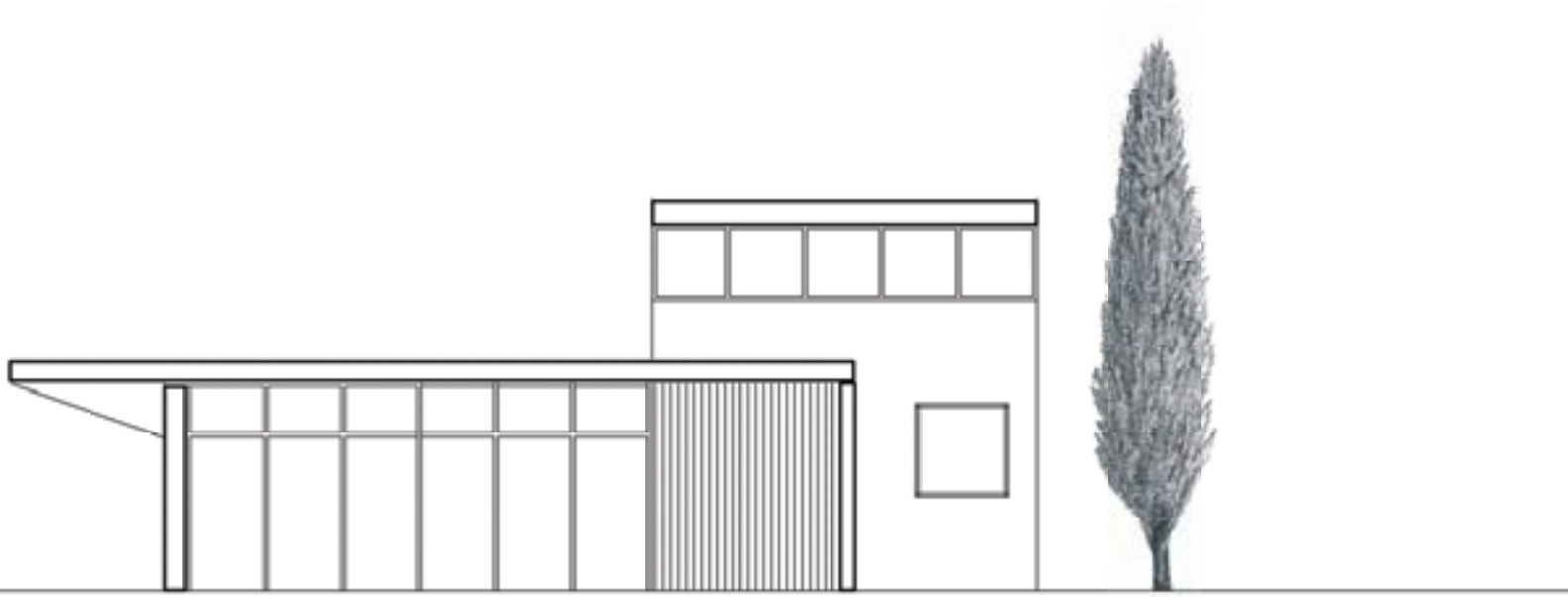
GT330-430-530 / DTG 230-330

PROJECT



Tried and tested De Dietrich technology

>> Reliability and long life

>> Highly efficient

>> Large output range

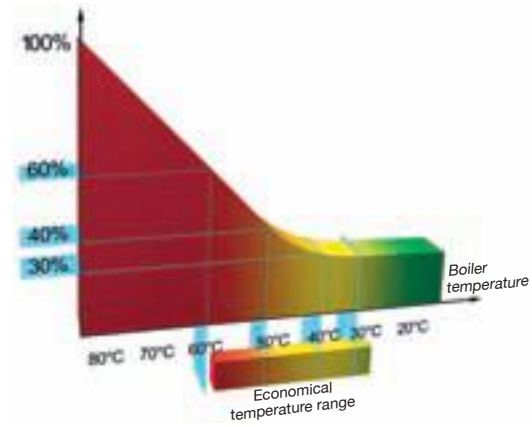
>> EUTECT® CAST IRON : FOR RELIABLE AND LONG-LASTING BOILERS

Low temperature boilers benefit from the experience of De Dietrich as a foundry since 1684. The material used, **eutectic**® cast iron, involves a very specific manufacturing process, developed to obtain defined mechanical properties and perfectly adapted to quality boilers with a remarkably long life.

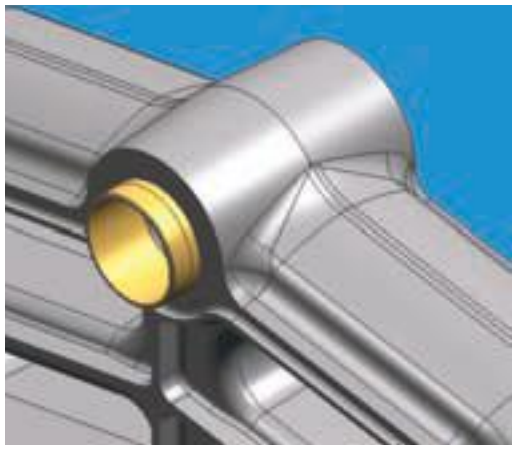
>> Ideal properties for low temperature

- The resistance to corrosion of eutectic® cast iron **allows no return temperature limit**.
- Its castability enables it to be spread homogeneously and harmoniously in the moulds and to acquire **an uniform and constant thickness** of the walls, which affords highly appreciable possibilities for the use of the low temperature technique.
- It lets you create **substantial and optimised thermal exchange surfaces**.
- The three-pass flue ways lets you **control the course of the flue gases**.

MAINTENANCE CONSUMPTION



>> A solution for all configurations



Perfect watertightness thanks to the method of assembly by bispheric nipples and silicon joints while limiting propagation of sound waves, enabling silent operation.

Low temperature boilers in the DTG and GT ranges satisfy the most diverse situations and constraints.

- **A broad range of outputs: between 54 and 1450 kw (46 to 1250 Mcal/h),** and even more in the case of **installations in cascade;**.
- Solutions to access problems even in the tightest corners: **boilers can be delivered in separate sections**, thanks to the flexibility of use offered by sectional boilers.

>> Example of installation

Operating principle

Installation of 2 boilers in cascade with 3 circuits with mixing valve + 1 domestic hot water circuit connected to the GT 330, 430 or 530 DIEMATIC-m3 master boiler, and 2 circuits with mixing valve connected to boiler no. 2: GT 330/430/530 K3, all of these circuits behind a decoupling tank.

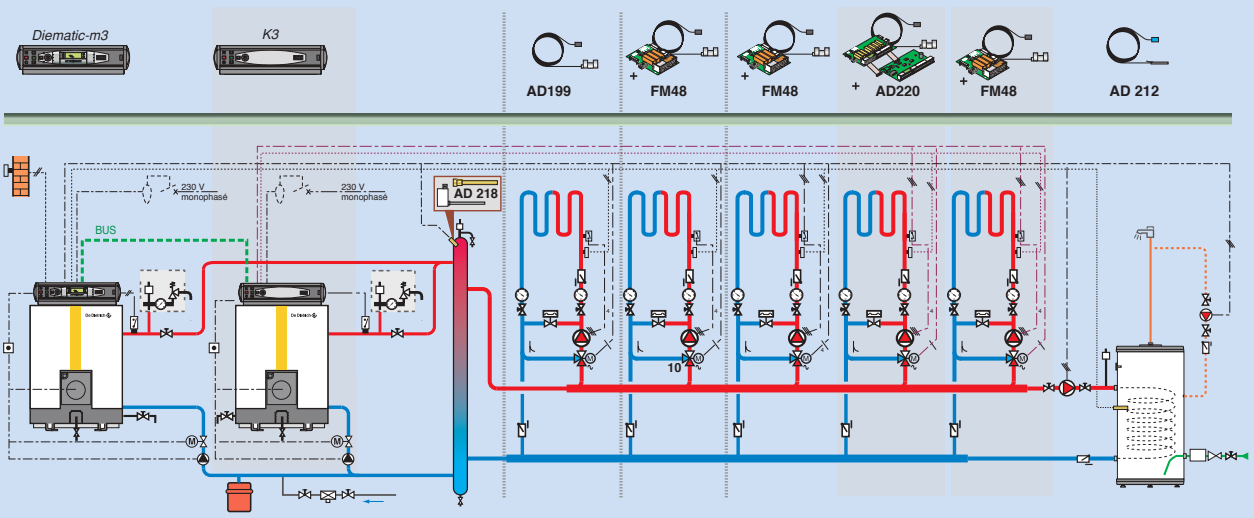
>> PERFORMANCES AND SIMPLICITY

DIEMATIC system: efficient and intelligent.

- **The programmable control unit** acts on the burner (depending on the model: 1, 2 stage or modulating) according to outside air temperature.
- **It manages up to 10 boilers in cascade and 40 variable temperature zones**.
- A user-friendly conversational interface with a backlighted display makes it **easy to use**.
- **Building management system is possible via 0-10 V signal plug**.

Reliability, energy savings, protection of the environment, silence and optimal comfort: De Dietrich offers a large range of robust and reliable oil or gas burners, with power ranging from 16 to 2 290 kW (13 to 1970 Mcal/h).

Fuel and fuel air flows are factory preset.
Ideal for De Dietrich boilers, they adapt easily to other brands on the market.



The GT range consists of low temperature boilers, to be fitted with a oil or gas burner, with 4 possibilities for control panels (standard, B3 ,K3 or Diematic m3).

Three-pass flue ways, with a large design combustion chamber and horizontal flue ways with fins enables optimisation of heat exchanges.

- High efficiency (** classification according to the European Directive 92/42 CEE)
- High annual combustion efficiency : 96 %
- Hygiene of optimal combustion and minimal NOx and CO emissions
- Low sound level

A burner door mounted on reversible hinges (choice of which way to open), sweeping doors and large flue ways, sweeping traps on the rear smoke box.

- Easy access from the front for maintenance and sweeping
- Low temperature operation with modulated flow from 30 °C or 40 °C

Delivery by package, separate sections or assembled body on request.

Sections in eutectic® cast iron, guaranteeing remarkable resistance to heat variations, thermal shocks and corrosion.

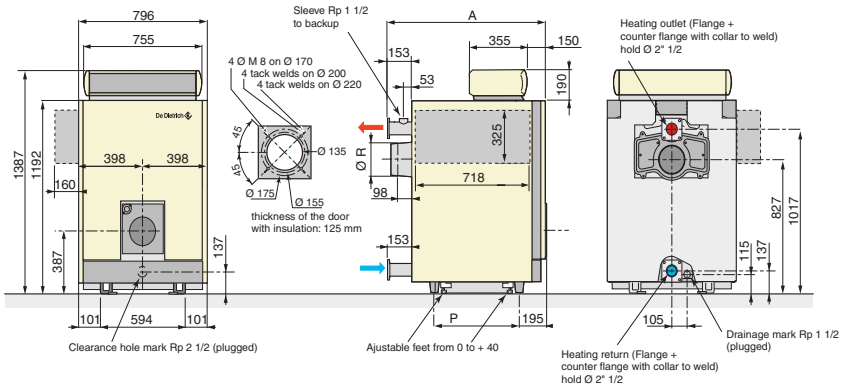
- Possibility for a total stop between two heating periods (cold start)

Mounting on a base frame.

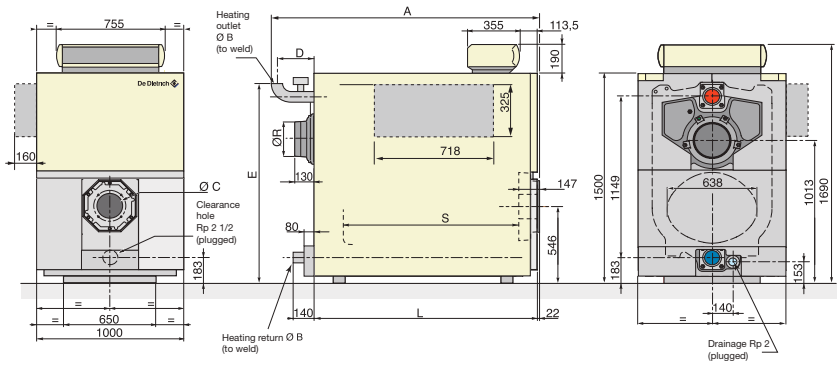
- Mounting anywhere, existing boiler room or new installation

Pre-set flow switch on GT430 and GT530.

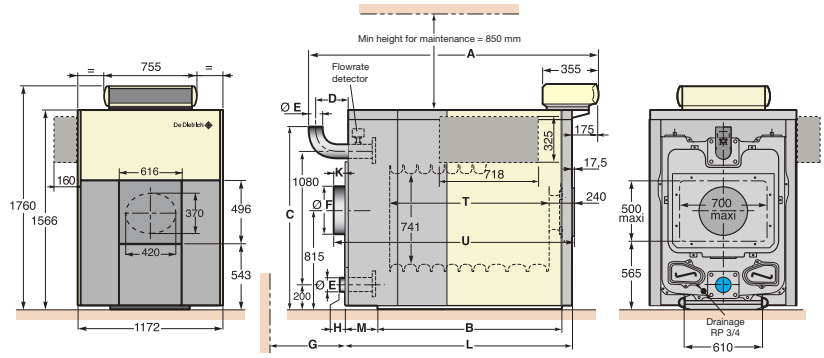
>> GT 330 – from 55 to 280 kW



>> GT 430 – from 250 to 700 kW



>> DTG 530 – from 348 to 1450 kW



The DTG range consists of low temperatrature gas atmospheric boilers, with 2-stage low-NOx total pre-mix burner (NOx < 70 mg/kWh), or 2-stage atmospheric burner (NOx < 260 mg/kwh) and 3 possibilities for control panels (B3, K3 or Diematic m3).

Eutectic® cast iron section with large exchange surfaces.

- High efficiency (** classification according to the European Directive 92/42 CEE)

Cast iron section with large exchange surfaces with moulded spikes, mounted on a base frame, limiting thermal bridges to the floor, and strong insulation.

- High annual operating efficiency: up to 96%

An atmospheric burner without fan.

Eco.NOx total pre-mix burner.

- Low sound level
- Hygiene of optimal combustion and minimal NOx and CO emissions.

Delivery by package, separate sections or assembled body on request.

- Mounting anywhere, existing boiler room or new installation

Sections in eutectic® cast iron, guaranteeing remarkable resistance to thermal shock and corrosion.

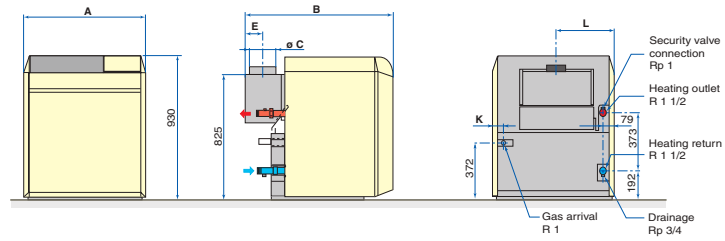
An upper inspection hole.

- Low temperature operation with modulated flow from 30°C or 40°C

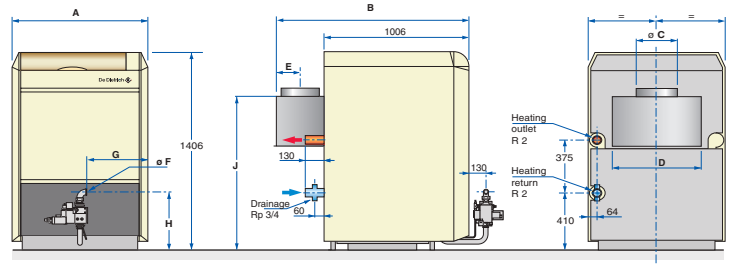
A burner-draw system

- Easy access for maintenance and sweeping

>> DTG 230 – from 54 to 117 kW



>> DTG 330 – from 119 to 380 kW



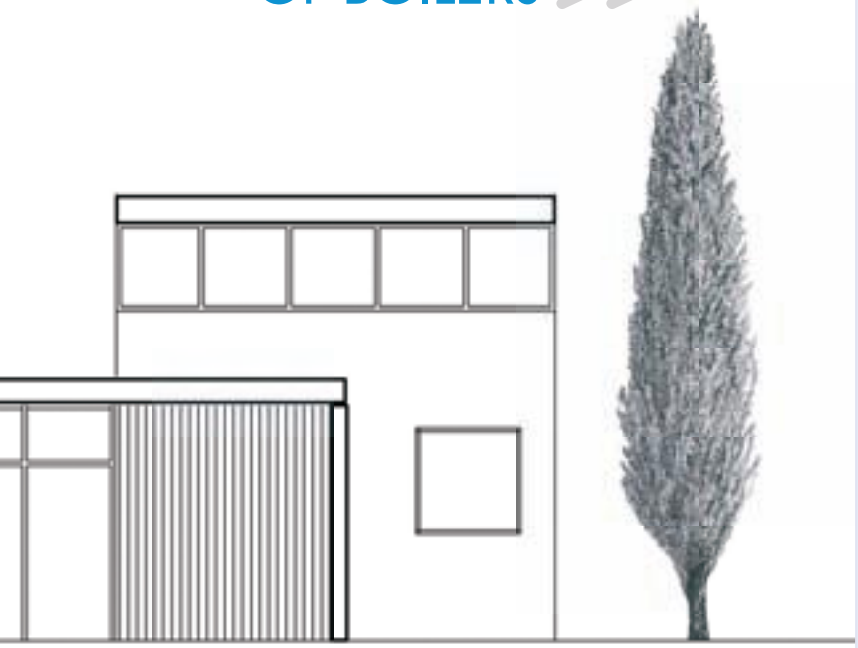
<< I NEED **RELIABLE, HARD-WEARING** EQUIPMENT >>

- Water content of boilers up to approximately **1 L/ kW**
- No minimum return temperature

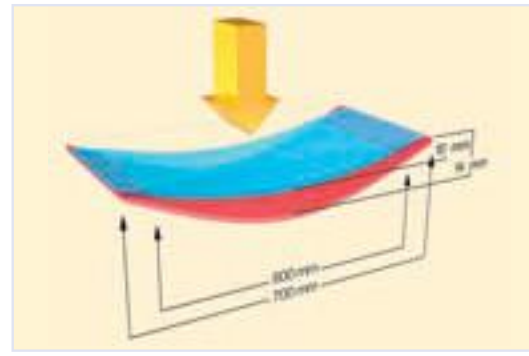
<< WE ARE LOOKING FOR **PERFORMANCE** >>

- Annual efficiency on PCI of **96 %**
- Operating pressure **6 bar**

<< **A MATERIAL PERFECTLY ADAPTED** TO THE **MANUFACTURE** OF BOILERS >>



EUTECTIC® CAST IRON



Substantlal flexibility

- A very homogeneous structure providing **substantial resistance** to corrosion and an extensive life span: eutectic® cast iron only corrodes on the surface.

In addition, tests reveal an annual corrosion of less than 0.1 mm, whereas max authorised erosion is 3 mm;

- Very low thermal expansion coefficient compared with other materials and consequently **considerable resistance to thermal shocks**.

It expands 20% less than steel and 2.3 times less than aluminium (laboratory tests on a 1 m long piece at 100°C).

- **30% greater flexibility than grey cast iron** traditionally available on the market.


GT 330


GT 430


GT 530

Cast iron oil/gas boilers

Models			334 to 339	430-8 to 430-14	530-7 to 530-25
Output		kW	90 to 280	310 to 700	406 to 1450
Efficiency in % NCV loaded ...% Pn and average temp ...°C	100 % Pn at 70 °C	%	91 to 92	92,1 to 91,8	90,9 to 91,7
	30 % Pn at 40 °C	%	95,2 to 96,3	95,8 to 95,2	93,8 to 95,1
Water content		L	96 to 196	366 to 624	389 to 1057
Flue gases temperature		°C	195	200	190
Empty weight		kg	612 to 1230	1802 to 2550	1852 to 5297
Control panel	Standard S3		•	•	•
	B3		•	•	•
	Cuadro K3		•	•	•
	Diematic m3		•	•	•


DTG 230


DTG 330

Cast iron gas boilers

Models			DTG 230... Eco.NOx 230-7 to 230-14	DTG 230...S 230-7 to 230-14	DTG 330... Eco.NOx 330-8 to 330-20	DTG 330...S Eco.NOx 330-8 to 330-20
Output	1 stage	kW	27 to 54	27 to 54	88 to 239	98 to 266
	2 stage	kW	54 to 117	54 to 117	126 to 342	140 to 380
Efficiency in % NCV loaded ...% Pn and average temp ...°C	100 % Pn at 70 °C	%	91,3 to 92	91,3 to 92	91,7 to 92,5	91,5 to 92,4
	30 % Pn at 40 °C	%	90,3 to 90,9	90,3 to 90,9	92,7 to 93,5	92,5 to 93,4
Water content		L	29,0 to 54,2	29,0 to 54,2	61 to 152	61 to 152
Flue gases temperature		°C	135	135	116 to 131	123 to 140
Empty weight		kg	230 to 408	230 to 408	575 to 1350	575 to 1350
Control panel	Standard S3		•		•	•
	K3		•		•	•
	Diematic m3		•		•	•

A MARK OF EXCELLENCE

For 300 years, De Dietrich's success was based on some key fundamental values: quality, reliability, durability. Through its concern for the environment and for your comfort, De Dietrich has now a comprehensive understanding of the various renewable energies through multi-energy systems that protect the planet. Therefore, heating appliances which bear the De Dietrich name are at the cutting-edge of innovation and have the advantage as they benefits from the commitment and the on-going expertise of their 2400 employees.

De Dietrich: choosing Sustainable Comfort®

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